Transportation
Land Development
Environmental
Services

Vanasse Hangen Brustlin, Inc.

Kilton Road
Six Bedford Farms, Suite 607
Bedford, New Hampshire 03110-6532
603 644-0888
FAX 603 644-2385

Attendees:	ATF Meeting # 4 See Attached list	Date/Time:	6/22/00, 6:00pm
		Project No.:	50885
Place:	Searles School , Windham	Re:	Exit 3, Windham; Salem Manchester - 10418-C, I-93 Widening, 50885
		Notes taken by:	Bruce Tasker; annotated/Jeff Brillhart

Tom Case, Chairman of the Advisory Task Force (ATF), opened the meeting. He indicated that he was no longer a member of the Salem –Plaistow MPO and as such may not be the Chair of the ATF after this meeting.

Jeff Brillhart, NHDOT Project Manager, asked the ATF members to introduce themselves. Al Turner, Bruce Thomas, Bill Stergios, Dean Kacos, Jim Turse, Keith Wolters, Alan Cote', Roger Hohenberger, Andre Garron, Carol Granfield, Leigh Komornick and Tom Case were all present.

Jeff noted that meeting minutes for the June 1, 2000 meeting has been distributed to the ATF members. Jeff asked if there are any edits please let him know. Jeff Brillhart introduced the project team. Jeff passed out a meeting agenda (attached) and a project schedule (attached), and reviewed the overall project status.

The first item on the agenda is project status

Jeff noted that the project is moving forward quickly. The Department is looking at widening of I-93 and from the existing two lanes in each direction to four lanes, with the fourth lane being a HOV lane. The project is in the beginning stages and the proposed lane configuration represents the worst case footprint. The Department is also looking at putting in a rail line in the corridor of I-93. The Department is not proposing to build the rail line as part of the widening of I-93, but we need to evaluate the possibility so as to not preclude the opportunity for a rail line in the corridor in the future. The Department sees rail coming to NH, whether it be in the abandoned line to the east, in the I-93 corridor, or a new rail corridor.

The Department is in the process of updating its ridership volumes, to identify how busses, trains and carpooling might effect the corridor design. Later this summer we will have the ridership projections available for presentation.

One milestone that has been completed is the publication of the Scoping Report for the I-93 corridor. The completion of this document signifies the end of Phase 1, Data Collection and Issues Identification. Each member of the ATF has a copy. Copies have been distributed to the Communities, Regional Planning Commissions, and the Resource Agencies. Not enough copies are available for everyone to have one, but Jeff suggested that people contact the town library or town administrator to review a copy. If someone needs a certain part, contact Jeff for a copy. Jeff

asked that the report be reviewed to be sure that all the elements are correct and up to date. This document will act as the foundation for the study.

The Department is preparing engineering concepts beginning at the state line and proceeding northerly. The first sets of concept plans have been developed from the Massachusetts line through Exits 1 & 2 and were presented in Salem on June 1, 2000. The concepts that we are looking at tonight are along I-93 in the Town of Windham and at the Exit 3 interchange. These are the primary focus of tonight's discussion.

Jeff also mentioned that the concept plans presented tonight are preliminary, first-cut and are subject to change.

Jeff mentioned that 5 or 6 years ago the Department had looked at reconstruction concept for Exit 3 interchange as part of the Windham – Salem NH 111 study. The concept was fairly ambitious, and it was suggested that the concept be re-evaluated as part of the I-93 project.

The Department has been working with the Resources Agencies since the project began and the agencies understand as to the approach the Department is taking. The agencies are, however, concerned about expanding I-93 to four lanes. The agencies feel that such an expansion will reduce the opportunity to reduce SOV's on the system. Jeff noted that the agencies understand that the highway will have impacts to the natural resources, and those impacts will have to be mitigated in a reasonable way. The agencies are receptive to the Department's vision of providing for a future rail element within the I-93 corridor.

Tony Grande described the engineering concepts:

Tony noted that all concepts are being presented at a scale of 1"=200 ft color base map covering the area between the Salem/Windham Town line to the south and Windham/Derry Town Line to the north.

Each of the concepts was developed to accommodate 8 lanes with provisions for rail and HOV opportunities (76-ft width). The footprint of the proposed rail corridor layout was developed to allow for a light rail, two-track facility (62-ft width for a closed drainage system, and 87-ft width for an open-ditch drainage system). The intent is to develop the highway widening (using as much of the existing pavement area as possible) and to provide for the accommodation of future rail line within the existing median area.

In developing the rail options for the Exit 1 and 2 area to the south, one concept shows the rail corridor along the westerly edge of I-93 to minimize resource impacts. The concept would pass to westerly side of Exit 2 swing wide to the west to create a reasonable skew for the rail line to cross over I-93 and then loop back (50 to 60 mph design curvature) into the median area in the vicinity of the Salem / Windham town line. This alignment would create right-of-way impacts in Windham. The other options developed for call for the rail corridor to be within the median area. Beginning just north of the Exit 2 Interchange area, in the vicinity of Brookdale Road, the concept to improve I-93 calls for all substantial highway mainline improvements to occur within the median area. Just to the north, the I-93 NB and SB mainlines diverge, the median begins to widen, and the proposed rail corridor follows the existing NB mainline alignment to a point just south of NH 111-A. The proposed rail then (due to a steep 5% grade associated with the SB mainline) follows the realigned I-93 NB mainline through the Exit 3 interchange area. As the rail layout is extended northerly opportunities for rail stations are also being considered. Rail stations are being considered for all interchanges except at Exit 1. It appears that soundwalls, if warranted, can be accommodated within the existing right-of-way near along the residential area off South Shore Drive.

Tony presented the design north of Exit 3. He pointed out the controls that drove the design including the recent construction at the weigh stations, the recently reconstructed bridges at North Lowell Rd. (reconstructed to accommodate a widening to four-lanes), and the Bridge St.

pond as well as ledge areas. In most areas, there is enough width to accommodate the rail and widening in the median.

Exit 3 Interchange Concepts

General: The existing Exit 3 interchange configuration is a half- cloverleaf with 2 loop ramps (SB Off, NB On) to the south of NH 111. The SB ramp intersection with NH 111 is unsignalized while the NB ramp intersection with NH 111 has signals. Five concepts were shown for reconfiguring the I-93 /NH 111 Exit 3 interchange to accommodate the future traffic needs. Each of the proposed Exit 3 interchange concepts presented will utilize the same realignment concept for the I-93 NB and SB mainline through the Exit 3 interchange area (option 5 has a minor variation). This portion of the I-93 mainline concept was reviewed and retained from a previous study prepared by the Department, NH 111 Windham–Salem, 10075. The I-93NB mainline layout involves the westerly shift (from 0 to 500 feet) of the I-93 NB barrel on new alignment for approximately one mile. The existing NB barrel will be utilized, where possible, as part of the redevelopment of the reconstructed NB interchanges ramps. The I-93 SB barrel will shift easterly (from 0 to 75 feet) and generally follow the existing SB alignment. All concepts developed for the SB interchange ramps call for the elimination of the current southerly quadrant partial clover design. (Based on information identified in the DEIS for the NH 111 Windham – Salem project, retaining and redeveloping the current partial clover interchange design to modern highway standards would have created substantial impacts to the Castleton complex. The concept would also have rekindled the town officials concerns that the tight radius associated with the SB off-ramp inner loop might lead to trucks overturning and spilling their contents into the east shore of Cobbetts Pond.)

Concept 1: This concept is essentially the previously proposed NH111/I-93 interchange improvements developed as part of the Windham-Salem (10075) project design. The proposed improvements call for a 5-lane section along NH 111, and begins in the vicinity of the NH 111-A/ NH 111 intersection and ends just east of the NH 111/Wall Street intersection, a distance of approximately 1.5 miles. From Wall Street to I-93, this concept shifts NH 111 northerly approximately 400 feet to reduce impacts to the businesses located along existing NH 111 through this segment. These businesses would be able to access the existing bypassed portion of NH 111 via a new connection opposite Wall Street/NH 111 intersection (4^{th} leg). The NB interchange ramps for this alternative utilize the existing NB mainline as a CD type facility and provide for: a free-flow NB to WB connection to NH 111; a NB to EB diamond type off- ramp configuration; and free-flow on and off ramps for EB and WB NH 111 traffic accessing I-93 NB. The proposed SB interchange configuration provides for a diamond on and off-ramp layout connecting to the proposed relocated section of NH 111. The EB NH 111 traffic to I-93 SB on-ramp would be a free flow movement w/o signals. Signals are located at the NH111 intersections with Wall Street, SB ramps (LOS B), the access to the proposed park & ride lot, the NB off ramp and NH111-A. Seven new bridges (including rail) are needed to develop the interchange system.

Concept 2: This concept again utilizes the I-93 NB and SB mainline realignment concept. The concept calls for widening existing NH 111 beginning in the vicinity of the NH 111-A/ NH 111 intersection and ends just east of the NH 111/Wall Street intersection, a distance of approximately 1.2 miles. The intent of this concept is to show the property impacts associated with widening NH 111 and keeping the overall work along NH111 to a minimum. The SB interchange ramps would be reconfigured to a diamond type layout connecting with the reconstructed and widened section of NH 111. The EB NH 111 traffic to I-93 SB on-ramp would be a free flow movement w/o signals. This free flow will be hindered by the close proximity of the Castleton access drive. The NB ramps will utilize a portion of the existing I-93 NB barrel to provide for a 2-lane NB off-ramp to NH 111 (double-left and double-right turns at NH111 signal,), a free-flow EB NH 111 to NB I-

93 loop type on-ramp onto a CD road and a free-flow WB NH 111 to NB I-93 on-ramp to the CD road. The NB off-ramp would be relocated approximately 1000 feet west of the NH 111-A intersection. Signals would be located at the NH111 intersections with the SB ramps (LOS B), the access to the proposed park & ride lot, the NB off ramp (LOS C/D) and NH111-A (LOS C).

Concept 3: This concept again utilizes the I-93 NB and SB mainline realignment concept. This concept calls for the retention of a portion of the proposed NH111/I-93 interchange improvements developed as part of the Windham-Salem (10075) project design (similar to Concept 1). The proposed improvements call for a 5-lane section along NH 111, and begins in the vicinity of the NH 111-A/ NH 111 intersection and ends just east of the NH 111/Wall Street intersection a distance of approximately 1.5 miles. From Wall Street to I-93, this concept shifts NH 111 northerly approximately 400 feet to reduce impacts to the businesses located along existing NH 111 through this segment. These businesses would be able to access the existing bypassed portion of NH 111 via a new connection opposite Wall Street/NH 111 intersection (4^{th} leg). The I-93 NB ramps will utilize a portion of the existing I-93 NB barrel to provide for a 2-lane NB off-ramp to NH 111 (double-left and double-right turns at NH111 signal), a free-flow EB NH 111 to NB I-93 loop type on-ramp with provisions for NH 111 WB traffic to access the loop ramp through a left turn signal. The proposed SB interchange configuration provides for a diamond on and off-ramp layout connecting to the proposed relocated section of the NH 111. The EB NH 111 traffic to I-93 SB on-ramp would be a free flow movement w/o signals. Signals are located at the NH111 intersection with Wall Street, SB ramps (LOS B), the access to the proposed park & ride lot, the NB off and on-ramp (LOS D) and NH111-A (LOS C). Four new bridges (including rail) are needed to develop the interchange system.

Concept 3A: This concept is basically the same as Concept 3 but realigns NH 111 to bypass at least some, but not all, of the driveways along NH 111 west of I-93 SB. The alignment also provides two possible connections between a proposed frontage road and relocated NH 111, however each of these connections has potential problems with the introduction of additional intersections too close to the interchange ramp intersections.

Concept 4: This concept is a variation of Concept 3, whereby the SB ramps are reconfigured to eliminate the signal at NH111/SB ramps as proposed in concept 3. The NH111 EB to I-93 SB traffic access I-93 similar to concept 3. The NH 111 WB to I-93 SB traffic however, is redirected onto a proposed free-flow loop ramp located in the northwest quadrant of the interchange. The traffic would connect with the NH 111WB to I-93 SB ramp traffic on proposed CD road before merging with I-93 mainline. The I-93 SB traffic would be connected to a relocated NH111 at a proposed signalized intersection (LOS A/B) just west of the loop ramp. This concept would require an additional bridge for the SB loop on-ramp connector.

Concept 5: This concept looks at trying to maximize the amount of available land for park and ride facilities within the median by shifting the proposed relocation of the I-93 NB barrel as far east as possible while holding the existing I-93 NB mainline tangents; and developing the NB on and off-ramps to NH 111 to a diamond type configuration. This realignment variation of the NB barrel would shift the alignment approximately 170 feet to the east while providing for reasonable geometry for 70mph. The shift however, requires that some of the I-93 NB widening occur outside the existing right-of-way in the vicinity of NH111-A. This idea was not carried any further, because it was felt that the impacts were greater than the additional space gained for the park and ride area. The proposed ramps require a signalized intersection along NH 111A (LOS D) where the queued vehicles are required to stop and start and turn on a 5% grade.

Rail Station /Park & Ride Concept: A rail station with a park and ride for approximately 600 vehicles was shown in the median area south of NH 111.

Jeff discussed the schedule.

Jeff noted that the next ATF meeting would be on July 27, 2000 at the Running Brook School in Derry at 6:00. The Department continues to meet with the Resource Agencies once a month to keep them up to date on the process. We are looking to complete the ridership projections in August or September time frame. Jeff also noted that the Department is moving, as quickly as it can, but there are many issues to be evaluated. One element under serious consideration is increasing the number of park and ride facilities along the corridor. The Department would like to do this early on to help reduce current congestion and especially when construction begins along the I-93 corridor.

Tom Case opened the floor to questions and comments.

Ron Casagrande.	Will the area at Exit 3, between the New NB and SB barrels, be retained as a two-lane area as it is today?
Tony Grande.	The Department will actually be looking at a 5-lane section, two lanes in each direction with a median that can accommodate turn-lanes as appropriate.
R.W. O'loughlin.	A number of residents along N. Shore Rd. (Corbetts Pond) in Windham are concerned with the grades along I-93. Trucks breaking as they come down I-93 SB and changing gears as the try and accelerate NB are creating a lot of noise. By law we are suppose to have sound barriers because the homes were here before the highway. Can we get acoustic barriers to absorb some of the sound? The pond creates a echo effect for all noise.
Jeff.	The Department will be looking at noise, in accordance with state and federal policies. We will be looking at sound barriers, typically concrete posts with wood planks between the post. The Department has built a number of these barriers along the F.E. Everett Turnpike in Nashua. They will be built along the Bodwell Road section of I-93 just north of Exit 5. Whether the noise along the north end of Corbett's pond needs to be abated will be evaluated as part of the project's noise study. What the barrier will cost and how many homes will be benefited will be evaluated on a cost/benefit basis. If the cost turns out to be very expensive and benefits only a few homes, then a wall would not be built.
R.W. O'loughlin.	During the design if the grades could be looked at to reduce the downgrade from 4% to 2% and the upgrade from 5% to 4%, that would help decrease some of the noise in the area. Elevating the highway would help reduce the grades. Another area that needs to be looked at is the area right outside this building, all the traffic comes through here with all the noise and congestion.
Jeff.	The situation on NH 111 east of I-93 is being addressed by a project that was looked at with the Towns of Windham and Salem and brought to a Public Hearing in 1995. That portion of NH111 will be reconstructed beginning in 2003.
R.W. O'loughlin.	With respect to the NH111 and its intersection with N. Shore Road, there have been 8 accidents, with one person permanently disabled at that location. I have written to the Governor and met with the Governor, someone should look at that area.
Jeff.	The option that relocates NH111 400 ft north of existing NH 111 will eliminate the N. Shore Road's direct access onto NH111 with an improve access opposite Wall Street.
Comment.	It is difficult to see how everything overlaps, how will the rail be accessed? If accidents happen how will emergency staff get to the train? Also, concrete sound

	barriers are very ugly and claustrophobic. Will any trees be planted or other measures be put in place to improve the visual effects?
Jeff.	Relative to aesthetics, noise barriers are constructed because trees do not provide much relief from noise. Landscaping is often installed as part of the sound barrier construction, but the highway widening and the construction of sound barriers will alter the look of the highway.
Tony Grande.	Relative to access to the rail in emergency situations, the proposed width will accommodate an access road, which runs adjacent to the rail corridor within the median. In addition, there is a 14-ft enforcement shoulder which runs adjacent to the median both NB and SB, which could provide access for emergency vehicles. There will be breaks for maintenance vehicles. The plans are very conceptual and the issue will need to be considered in more detail as the design is advanced.
Betty Dunn.	Would it be possible to develop a loop system that makes the present NH 111 EB one-way and the relocated a section of NH 111 the other way, with connections in-between for reversing direction. This would address some of the safety issues involved with traffic coming out of N. Shore Road and onto NH 111. Also, I would like to emphasize the acoustical problem we have with the two lakes so close together, that noise seems to skip across the water surface bringing the noise to homes quite a distance from the highway. I can hear trucks coming from the Brookdale Bridge area and hear them trying to climb the grade north of Exit 3. The water seems to bring the noise very close.
Roland Shrull.	My impression is that the team has not looked at noise as a major factor, but you will be looking at this element in the future. My concern is you have made estimates of future traffic volumes, will you make estimates of the future noise levels? Are there any standards that you must meet?
Jeff.	The Department will be estimating noise levels based on the future projected traffic volumes. Relative to the guide lines the Department follows, a barrier would not be proposed if there is not at least a 5 decibel decrease experience with the barrier. Below a 5 decibel increase there would be no barrier provided. If the highway improvements result in a 15 decibel increase or the noise levels exceed 67 decibels then you would qualify for a barrier, assuming that the addition of a sound barrier would provide relief of at least 5 decibels. In addition, the cost/benefit would be evaluated to see if a barrier is warranted.
Tom Case.	Tom asked for a show of hands, regarding the acceptability of the loop designs presented for the rail alignments in the vicinity of the Salem/Windham townline. The show of hands indicated that such a design would not be acceptable.
Ruth Coole.	I have lived on my property of N. Lowell Road for four years now, and something has happened in the last two years. There seems to be more noise coming from the highway, perhaps because of the expansion of the weigh stations. Will the I-93 widening extend beyond the right-of –way?
Tony Grande.	In the area of N. Lowell Road it appears that some of the widening will be towards the median and some will be towards the outside edges of the existing highway. The total right-of-way width of the I-93 corridor in this area is approximately 400 ft. The Department could still widen the highway to the outside and remain within the highway right-of-way (i.e. highway property boundaries), but it is too soon to determine whether it will or not.
Carolyn Webber.	If you have four-lanes NB and SB and a rail line, will that be redundant? Also, if you have four-lanes SB in NH going to 3 lanes at the state line, will that be a problem? Is Massachusetts looking at expanding I-93 also?

Jeff. Massachusetts is in the process of studying improvements to I-93 from the state line to the beginning of the full eight-lane segment. If eight lanes are constructed in NH, overtime they will become more congested, at which point the rail line will provide relief.

Ron Casagrande. I have traveled I-93 for 24 years, and based on the schedule you presented we won't be seeing this completed for another 10-years. Why is this taking so long?

Jeff. Ten years is a long time. The project is a priority, as the interstate is definitely substandard and needs to be corrected. The Department must follow the Federal and State environmental process to obtain approvals, and construction will need to be segmented into manageable construction projects that provide for maintenance of traffic. The suggested time frame is not unreasonable given the magnitude of the project.

Ron Casagrande. Will the bridges be raised along I-93 over NH 111?

Tony Grande. With the proposed design, the NB bridge will be relocated 600 ft westerly and the grade raised. The combination of relocation and grade raise will provide approximately 40 ft of clearance over NH 111. The SB bridge will be relocated approximately 75 ft easterly and the grade raised approximately 5 ft.

Marilyn Campbell. I have sat through these meeting in the late 80's where it was stated that the first phase would be completed in 1991, the second phase in 1993, and the third phase in 1995, so here we are, and we still don't have it done.

Comment. In which direction is the widening proposed in the area of South Shore Road. Will the widening come onto our property? How will the proposed widening affect us in terms of noise and property impacts?

Tony Grande. Some of the widening is to the outside and some to the median side.

Jeff. More study is required to fully identify the impacts. In the final analysis, if property were needed to complete the improvements then the Department would meet with the property owners, appraise the property relative to the impacts, and negotiate a settlement. With respect to noise, we need to do noise studies and identify where noise barriers are warranted.

Comment. If your noise studies show that the cost/benefit of constructing a barrier is not realized, will nothing be provided?

Jeff. That is correct, that is the process.

Nancy Girard. One of the fundamental problems I see with rail down the median is the design speed is 60mph. With high speed rail like the one from Boston to Portland rated at 79 mph, I don't feel that people will get on a train when they can get into a car doing 80mph and the train only does 60mph. I am also not sure of the utility of the rail option. It does not appear to be a viable option for commuters to get back and forth.

Jeff. The plans are set up so that the I-93 highway layout does not preclude the possibility rail for the future. At some point when the political will and funding is there to support rail, then another study will have to be undertaken to see whether this rail corridor or some other rail corridor should be developed. The rail speed of 50-60mph may not be unreasonable given the station locations at the interchanges are relatively close to each other. This train is not going from Portland to Boston, but only from Manchester to stop at various places along the way and then connect to the Commuter line in Lawrence or continue to travel down the median into Massachusetts again to provide service to all the work places along the I-93 corridor with a possible terminus at the Woburn,

Massachusetts Transportation Center. In addition, with all the advancements in rail technology, the rail system actually built may be faster than what is available today.

Nancy Girard. As part of the Department's scoping of this corridor through the EIS process, you are charged with looking at various alternatives. The rail line that currently exists and partially owned by the State, will that line be actively considered as a viable alternative to widening I-93?

Jeff. As part of the I-93 study we have looked at the existing conditions of this rail line, known as the M&L branch as well as the Manchester to Lowell rail line. But as part of this study we are not proposing the implementation of a rail line. Data available indicates that rail will not solve the problems of, or eliminate the need to widen, I-93. The issues and conceptual possibilities associated with these rail lines are being looked at, but the focus of this study is to upgrade and widen I-93.

Roger Hohenberger. The Town of Windham has recently rezoned a portion of property (NW quadrant of I-93 exit 3), which is being impacted by some of the Exit 3 interchange concepts. We also understand that some of the parties that are looking to develop this area have contacted the Department and have looked at these concepts and are making decisions based on them. When will the concepts be firmed up?

Jeff. The more promising concepts will be looked at in more detail, and the others will fall to the wayside based on input received from all the stakeholders. The Department is trying to get to a Public Hearing to present what it thinks is the best alternative to meet the purpose and need of the project. The Public Hearing is currently scheduled for December of 2001. The Town and the abutters should have a good idea of the plan at that time.

Bill Schroeder. What will be done to mitigate the salt usage and other water quality impacts when you expand the highway from two to four lanes in each direction?

Tony Grande. The plans are not at that stage of design at this time, but the measures needed to address those issues will be developed as the plans are further refined.

Comment. As part of the I-93 project, how far westerly from the I-93 SB barrel will NH 111 be constructed as a four lane roadway?

Tony Grande. The actual design would vary with each of the interchange options shown, but in most cases four lanes would, in all likelihood, be carried to the Wall Street area and then transitioned back to the existing two-lane section of NH 111.

R.W.O'Loughlin. Strategically, the Department has constructed two bridges across the Merrimack River in Nashua, does the state propose to use NH 111 through Windham as the east-west access to I-93?

Jeff. That same concern was raised as part of the NH 111 study some time ago. I really don't have an answer for you, there will be traffic on NH 111. The project in Nashua was to get another crossing across the River because there was a need for an additional crossing. The Department has proposed a circumferential highway project around Nashua that will tie into that new crossing. That project is still going through the permitting process.

Bill Schroeder. How will the Windham-Salem NH 111 project tie into the widening of I-93?

Jeff. The NH 111 project begins at the NB barrel of I-93 and extends easterly along existing NH 111 as a five-lane roadway (two lanes in each direction with a center turn lane). Beginning near Searles Road, NH 111 travels on new alignment

passing just south of the industrial park, intersects NH 28 at-grade, and passes to the west of Shadow Lake before connecting back into the existing NH 111 to the east of Shadow Lake in Salem.

Comment. Would you put a rotary at NH 111 and NH 111-A?
Jeff. The Department is looking at a conventional at-grade intersection with signals and turn lanes.

Comment. In England I have seen electronic noise barriers, are these type of barriers an option?
Jeff. That has not been considered here in NH as yet. We'll have to look into that.

Comment. As stated in previous meetings the NH 111project has an exorbitant cost that the taxpayers of NH should question. The costs greatly exceed the cost estimated for Exit 4A and the airport access road.

Comment. Historic Resources were not discussed tonight?
Tony Grande. The plans show (circles overlaid on the structures) potentially historic properties. If during the design process we impact the property we will evaluate that impact with the State Historic Preservation Office and the Federal Highway Administration and steps will be taken to avoid or minimize impacts as practicable.

Wayne Morris. The Department should consider some type of visualization graphics at future meetings, it would make the concepts easier to understand.

Peter Griffin. Rail is being seriously considered in the Nashua area as well as the Seacoast area. The communities in this region of I-93 and NH 28 need to be more proactive in bringing railroad here. The region's future economy will suffer greatly if the railroad is not implemented.

Comment. Will the changes along NH 111 to the west of the I-93 corridor hold up the design of improvements to I-93 in any way?
Jeff. Improvements developed for NH 111 will be what is needed to complete the interchange concept and transition traffic back to the existing two lane section of NH 111 safely. Improvements to NH 111 west of what is needed to address the interchange are not being considered as part of this project.

Leigh Komornick In the Scoping Report for the project, the traffic numbers show future numbers for the year 2020. What is reasonable design period for a road?
Jeff. The design horizon is typically 20 years. Beyond that it difficult to project what will be needed. The statewide model is projecting the traffic volumes for the corridor. The numbers are showing four lanes south of Exit 3 are needed. North of Exit 3 we will have to make some choices as part of the alternatives analysis. We have not yet completed a full evaluation of the various alternatives. We may need to construct four lane for the entire corridor just to maintain traffic during the I-93 widening. Beyond the 20 years, if the traffic continues to grow it would appear that the Department will be looking real hard a rail alternative to manage traffic and provide adequate transportation.

Margaret Crisler.	I have a concern that we are trying to develop more commercial and industrial land to improve our tax base. First you impacted our industrial park along NH 111 and now the Department is going to possibly impact land to the north and east of Wall Street, a potential technology park. My comment is when you look at all the interchange options, remember that space for industrial development is important to Windham, and if people work in Windham it will help reduce some of the traffic along I-93.
Carol Higgins.	Back in 1995, the Department was talking about the need to acquire property for a water quality basin along the NB barrel that would impact my property. Is that still the case? Who should we address our questions to?
Jeff.	All questions related to this project can be addressed to me. My address is on the handout. Treatment measures to address water quality will be required and as the project progresses these measures and the impacts to private property will be developed in some detail.
Comment.	How long do you think before the rail system would happen?
Jeff.	The Towns of Windham, Londonderry, Salem, and Derry need to consider what Peter Griffin has said tonight. These towns need to start thinking about how rail might be of benefit and takes steps to pursue the opportunity. Funding for implementing and maintaining rail service is difficult to come by. It is difficult to say when rail service might be implemented, but it appears that rail will be part of our transportation future.
Tom Case.	Please describe the type of rail being considered for the I-93 corridor.
Tony.	The rail system being considered is a light rail system, similar to the Green Line in Boston. The rail is a 50 to 60 mph diesel or electric powered facility. This type of rail can traverse the type of grades (3 to 4%) found within the existing I-93 corridor. The rail can also fit within the same vertical clearances needed for the highway.